Mr. Jay Rhoderick
U.S. Department of Energy, EM-35
19901 Germantown Road
Germantown, Maryland 20874-1290

Dear Mr. Rhoderick:

The Environmental Protection Agency (EPA) is pleased to offer its views on the Department of Energy's (DOE) request for public comment (53 FR 13396, March 19, 1998) announcing DOE's intent to conduct a policy analysis regarding existing and alternative options for the disposal of certain DOE radioactive wastes. The radioactive wastes in question include low-level radioactive waste (LLW) and mixed low-level radioactive waste (MLLW).

EPA understands that present DOE policy regarding the disposal of such wastes is embodied in DOE Order 5820.2A, which strongly recommends disposal at a DOE site, although an exemption may be granted for disposal at a commercial disposal facility meeting all applicable Federal, State, and local requirements. At the same time, EPA is aware that DOE has received two proposals from private entities proposing different, alternative disposal arrangements at existing hazardous waste disposal sites. EPA understands that these two hazardous waste disposal sites are permitted under the Resource Conservation and Recovery Act (RCRA) but neither site is presently licensed under the Atomic Energy Act (AEA) to dispose of AEA radioactive wastes. EPA is also cognizant of draft DOE policy guidance that would represent another alternative to the options discussed in the March 19 *Federal Register* notice and offers comments on this alternative as well.

Our comments on both alternatives are attached. If you would like to discuss these issues further, please call me at (202) 564-9290.

Sincerely,

Lawrence G. Weinstock, Acting Director
Office of Radiation and Indoor Air

Enclosure

Comments on DOE's March 19, 1996 *Federal Register* Notice of Intent to Conduct Policy Analysis

EXISTING VS ALTERNATIVE APPROACHES

The March 19, 1998 *Federal Register* notice indicates that current DOE policy is contained in DOE Order 5820.2A, which encourages disposal of DOE waste at DOE sites as general policy. There is provision for an exemption to this general policy, however, permitting disposal at facilities other than DOE facilities if certain requirements are met. Accordingly, DOE Order 5820.2A indicates that the disposal of such material other than at DOE facilities must comply with all applicable Federal, State, and local requirements. In the case of a commercial disposal facility, whether a LLW disposal facility under the purview of the Low Level Radioactive Waste Policy Act (LLRWPA) or a RCRA hazardous waste disposal facility accepting LLW and/or MLLW, presumably a Nuclear Regulatory Commission (NRC) license would be required. EPA strongly endorses this approach because it would foster consistent and protective regulation of such waste disposal. This concept is further supported by the language of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (Section 4(b)(1)), which provides that Federal LLW disposed at a non-Federal facility shall be subject to the same regulatory requirements as LLW disposed at a commercial LLW disposal facility. Should a RCRA hazardous waste disposal facility be employed, the States would maintain their respective RCRA delegated authorities as well.

With respect to the Waste Control Specialists (WCS) proposal, EPA has concerns. Under this approach, a facility, such as the WCS hazardous waste disposal facility in Texas, could dispose of DOE radioactive waste under AEA authority derived from DOE without a license from the State in which the site is located. Although the United States Court of Appeals for the Fifth Circuit has not yet ruled on this matter, it is not clear that DOE has the legal authority to regulate contractors disposing of radioactive waste on land not owned or controlled by the U. S. government. If the court finds that DOE has such authority, it would not be prudent to exercise it and even deny States the authority to license disposal of radioactive waste on land within their borders not owned or controlled by the U. S. government. Such a policy should be expected to meet resistance from the States. Further, the WCS proposal would have DOE perform its regulatory role through a contract with a special regulatory entity. Environmental regulation is the role of governmental organizations and cannot be contracted out to the lowest bidder. Furthermore, if such a one-of-a-kind regulatory entity is established for each non-Federal disposal site used by DOE, inconsistency in regulatory determinations and thoroughness is likely to follow. Different levels of public health protection from State to State would result. Such an entity could not provide meaningful public input since the public would not be a party to the contract between DOE and its supposed regulator. There would be no ability for the public to enforce its terms. The result is sham regulation. DOE would be paying people to regulate it. The public would have no legal redress or long term guarantee of input. This scheme would have no public credibility and would not significantly move DOE from self regulation.

Instead, EPA considers more favorably the approach put forth by Laidlaw which would require it to obtain the necessary licenses and permits necessary to dispose of radioactive waste. EPA believes that compliance with appropriate permitting and licensing procedures will better insure proper treatment and handling of LLW and MLLW. EPA is currently developing a regulation, in consultation with NRC, that may facilitate licensing of facilities seeking to dispose of MLLW in certain hazardous waste disposal facilities. Although this approach has been developed to alleviate problems in the disposal of mixed waste in the commercial sector, it could be used to facilitate licensing facilities planning to dispose of DOE MLLW.

The *Federal Register* notice does not discuss the draft DOE guidance related to disposing of MLLW at non-DOE commercial facilities, but EPA believes that it is relevant to this policy analysis. Draft Directive 435.1-2 may be found on DOE's Internet homepage and describes detailed guidance that would allow DOE's Office of Environment, Safety and Health (EH-1) and in certain cases, DOE Field Office managers, to release from DOE's radiological controls certain hazardous wastes with residual radioactive material distributed throughout the volume or mass. Levels up to 25 millirem/yr might be approved based on an "as low as reasonably achievable" (ALARA) analysis. This would allow, for example, disposal of low-activity MLLW at RCRA disposal facilities with no further consideration of its radioactive content by DOE. The RCRA facility would be responsible for complying with any other non-DOE radiological requirements imposed by the State or NRC. Other than recordkeeping, it is not clear under DOE's draft directive that such issues as transportation, occupational exposure, long-term isolation of the waste, and co-location of such RCRA disposal facilities with similar RCRA disposal facilities, DOE disposal sites, or NRC disposal sites would be addressed. That numerous DOE authorities (Field Office managers and EH-1) may use a variety of different radiological assessment models to support their respective determinations has the potential to lead to regulatory inconsistency as well. EPA is concerned that each such RCRA facility approved under such a process will represent a unique approval arrangement. The goal, as expressed in section 6 of the draft directive, appears to be aimed at establishing a paper trail so that "all parties fully understand the actions proposed and that the actions may proceed" as opposed to establishing a consistent set of protective requirements that all such RCRA facilities must meet. EPA would prefer application of a consistent set of radiological requirements to all such RCRA facilities through an established licensing process.

In addition, it is not clear that any of the above options, including DOE's Draft Directive 435.1-2 or the requirements for radioactive waste management under DOE Order 5820.2A, provide for numerical ground water protection limits. Given that these regulatory approaches may allow up to 25 millirem/yr, it is possible that disposal sites permitted under such arrangements may allow drinking water near such sites to exceed the Maximum Contaminant Levels (MCLs) of the Safe Drinking Water Act. Unfortunately, this sets the stage for effluents from disposal sites to trigger future CERCLA clean-ups of these sites, ultimately costing DOE and the country more money than any immediate cost savings from the adoption of any of the existing or proposed alternatives.

Finally, EPA strongly supports the preparation by DOE of an environmental impact analysis pursuant to the National Environmental Policy Act, should DOE select any of these proposals with their potentially significant environmental impacts. As noted in the March 19 *Federal Register* notice, DOE estimates that approximately two million cubic meters of radioactive waste might be subject to disposal in commercial waste sites. This is a significant volume of waste and represents approximately 100 times the amount of LLW disposed by commercial LLW generators in 1995. It is EPA's view that any proposal on this scale would clearly require an environmental impact statement under NEPA.

EXTERNAL REGULATION

DOE must square the use of commercial facilities for its LLW and MLLW disposal with DOE's commitment to "external regulation." The notion that DOE should extend its regulatory control to disposal facilities not owned or controlled by the U. S. government runs counter to the recommendations of the "Advisory Committee on External Regulation of the Department of Energy and Nuclear Safety" that DOE has endorsed. If DOE adopted the WCS option, the Department would not be supporting the concept of external regulation but rather extending its oversight of facilities not currently on DOE land. This approach would also be in conflict with the Advisory Committee's recommendation that: "for any question having to do with limits on releases from DOE nuclear facilities to the environment, environmental standards governing the management and disposal of waste from DOE facilities, or cleanup sites, either EPA or the State to which EPA has delegated authority should have sole jurisdiction."

In summary, EPA urges DOE to adopt a policy that bolsters public confidence in radioactive waste disposal, provides long term guarantees of environmental protection and takes into consideration the concerns of the States, and maintains DOE's commitment towards external regulation. One possibility would be to adopt the Laidlaw approach which would require that facilities seeking to dispose of radioactive wastes obtain the necessary State permits and NRC licenses.